

CLAIMS

What is claimed is:

1. A method of
recovering embedded data from a data set, and
quantitatively determining degree of data corruption of the data set with respect to an
original data set by measuring degradation of recovered embedded data.
2. The method of claim 1, further comprising quantitatively measuring temporal duration of
data set corruption for data sets.
3. The method of claim 1, further comprising quantitatively measuring spatial extent of data
set corruption for image data sets.
4. The method of claim 1, further comprising measurement of watermarks embedded using
correlation based embedders.
5. The method of claim 1, further comprising measurement of watermarks embedded using
quantization based embedders.
6. The method of claim 1, further comprising quantitatively measuring corruption of
audivisual data sets by measuring corruption of temporally varied image frame watermarks.
7. The method of claim 1, further comprising measurement of global degradation of a
received data sets.
8. An article comprising a computer readable medium to store computer executable
instructions, the instructions defined to cause a computer to
recover embedded data from a data set, and
quantitatively determine degree of data corruption of the data set with respect to an
original data set by measuring the amount of recovered embedded data.

1 9. The article comprising a computer readable medium to store computer executable
2 instructions of claim 8, wherein the instructions further cause a computer to quantitatively
3 measure temporal duration of data set corruption for data sets.

1 10. The article comprising a computer readable medium to store computer executable
2 instructions of claim 8, wherein the instructions further cause a computer to quantitatively
3 measuring spatial extent of data set corruption for image data sets.

1 11. The article comprising a computer readable medium to store computer executable
2 instructions of claim 8, wherein the instructions further cause a computer to measure embedded
3 watermarks using correlation based embedders.

1 12. The article comprising a computer readable medium to store computer executable
2 instructions of claim 8, wherein the instructions further cause a computer to measure of
3 watermarks embedded using quantization based embedders.

1 13. The article comprising a computer readable medium to store computer executable
2 instructions of claim 8, wherein the instructions further cause a computer to quantitatively
3 measure corruption of audiovisual data sets by measuring corruption of temporally varied image
4 frame watermarks.

1 14. The article comprising a computer readable medium to store computer executable
2 instructions of claim 8, wherein the instructions further cause a computer to measure global
3 degradation of a received data sets.

1 15. A data degradation measurement system comprising
2 a watermark recovery module to recover embedded data from a data set, and
3 a measurement module to quantitatively determine degree of data corruption of the data
4 set with respect to an original data set by measuring the amount of recovered embedded data.

1 16. The data degradation measurement system of claim 15, further comprising a temporal
2 module to quantitatively measure temporal duration of data set corruption for data sets.

1 17. The data degradation measurement system of claim 15, further comprising a spatial
2 module to measure spatial extent of data set corruption for image data sets.

1 18. The data degradation measurement system of claim 15, further comprising a module to
2 measure watermarks embedded using correlation based embedders.

1 19. The data degradation measurement system of claim 15, further comprising a module to
2 measure watermarks embedded using quantization based embedders.

1 20. The data degradation measurement system of claim 15, further comprising a module to
2 quantitatively measuring corruption of audiovisual data sets by measuring corruption of
3 temporally varied image frame watermarks.

1 21. The data degradation measurement system of claim 15, further comprising a module to
2 measure global degradation of a received data sets.

1 22. A method of
2 embedding a signal that degrades with a host signal change, and
3 quantitatively determining degree of data corruption of a data set with respect to an
4 original data set by measuring the degradation of recovered embedded signal.